



United States Department of the Interior  
Bureau of Land Management

Battle Mountain District Office  
Battle Mountain, Nevada

October 29, 1996



**Record of Decision and  
Plan of Operations Approval**

**MULE CANYON MINE**



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## Mission Statement

The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based upon the principles of multiple use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air and scenic, scientific and cultural values.

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U.S. Department of the Interior  
Bureau of Land Management  
Battle Mountain District  
50 Bastian Road, P.O. Box 1420  
Battle Mountain, Nevada 89820

**RECORD OF DECISION  
AND  
PLAN OF OPERATIONS APPROVAL**

**MULE CANYON MINE**

**N64-92-001P  
NV63-EIS97-09**

**APPROVED BY:**



Gerald M. Smith  
Battle Mountain District Manager

**October 29, 1996**

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## RECORD OF DECISION

### Mule Canyon Mine NV63-EIS97-09

#### Summary

The decision of the Battle Mountain District Manager of the Bureau of Land Management (BLM) is to select the Proposed Action, which is a component of Santa Fe Pacific Gold Corporation's *Mule Canyon Plan of Operations and Reclamation Permit Application* (Plan of Operations), in combination with the mitigation measures and monitoring requirements analyzed in the Mule Canyon Mine Environmental Impact Statement (EIS). This decision allows the Battle Mountain District Manager to approve the development of the proposed Mule Canyon Mine. The selected alternative was identified in the Draft and Final EISs as the Agency Preferred Alternative. The BLM added five stipulated mitigation measures to the Agency Preferred Alternative which are identified and discussed in the Final EIS and restated in this Record of Decision.

This decision with the identified mitigation measures is designed to prevent undue or unnecessary degradation to the public lands. All practicable means to avoid or minimize environmental harm from the selected alternative have been adopted. Monitoring will be established to allow further refinement of the mitigation measures. All mitigation measures will be implemented and enforced.

Project alternatives identified and analyzed in the Draft EIS included the No-Action Alternative, the Proposed Action, the East Access Alternative, and the Overburden and Interburden Materials Disposal Area Configuration Alternative. A Project Location Alternative, Mining Methods Alternative, and Total Backfill Alternative were identified and considered in the Draft EIS but eliminated from detailed analysis.

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## DECISION

The decision of the Battle Mountain District Manager of the BLM is to select the Proposed Action (Alternative B), mitigation measures, and monitoring requirements as analyzed in the Mule Canyon Mine EIS. The selection of the Proposed Action allows the BLM, Battle Mountain District Manager to approve the development of the proposed Mule Canyon Mine. The selected alternative was identified in the Draft and Final EISs as the Agency Preferred Alternative. The BLM added five stipulated mitigation measures to the Agency Preferred Alternative which are identified and discussed in the Final EIS and restated in this Record of Decision.

## PROPOSED ACTION AND ALTERNATIVES

Project alternatives identified and analyzed in the Draft EIS included the No-Action Alternative, the Proposed Action, the East Access Alternative, and the Overburden and Interburden Materials Disposal Area Configuration Alternative. As described in the Plan of Operations and the EIS, the total project-related surface disturbance for all alternatives would be 2,931 acres. A Project Location Alternative, Mining Methods Alternative, and Total Backfill Alternative were identified and considered in the Draft EIS but eliminated from detailed analysis. In the Final EIS, the Proposed Action was modified to include BLM-stipulated supplemental mitigation measures. The following describes the project alternatives analyzed in the EIS.

### PROPOSED ACTION

The Proposed Action involves the construction, development, operation, and reclamation of a new surface gold mine and associated process and support facilities. Phase 1, as described on page 2-9 of the EIS, would include construction of basic mine support facilities, development of and mining operations in the mine pits, construction of associated overburden and interburden disposal areas, and construction and operation of the heap leach facility. Phase 2 involves construction and operation of the mine mill and associated tailings facility.

Specifically, the mine would include:

- Mine access road (west access);
- Mine haulage and ancillary roads;
- Growth media stockpiles;
- Surface drainage control structures;
- Five open-pit excavations requiring removal of approximately 11 million tons of ore and 90 to 100 million tons of overburden and interburden material over the life of the mine;
- Pit dewatering sumps and associated pumps, piping, and temporary holding ponds;
- Up to 14 overburden and interburden disposal areas with the potential for partial or complete backfilling of one or more mine pits;
- Two Class III waiver landfill sites for disposal of solid wastes;
- A temporary ore stockpile;
- Ore haulage to an existing Twin Creeks Mill;
- Heap leach facility and associated solution storage tanks, distribution systems, and gold recovery circuit;
- Possible future construction of process facilities including crushing, milling, pressure oxidation (autoclave), gold recovery, cyanide destruction, and tailings disposal facilities;
- Possible future haulage of limestone and concentrates to supply on-site milling operations;
- Support and ancillary facilities;
- Water supply well field, pumping system, storage tank, and distribution network;
- Initial 69kV transmission line and mine substation and potential future 120kV trunkline from existing Sierra Pacific power line;
- On-site utility installations;
- A bioremediation cell for treatment of hydrocarbon contaminated soils; and

- Environmental monitoring facilities.

The Proposed Action would affect a Project Area of approximately 9,236 acres, of which approximately 4,812 acres are public lands administered by the BLM's Battle Mountain District, 3,474 acres are private lands owned or controlled by Santa Fe Pacific Gold Corporation, and the remaining 950 acres are split estate lands (public surface and private minerals). Actual project-related disturbance will be limited to approximately 2,159 acres within the Project Area boundary and an additional 529 acres for access roads and borrow sources outside the Project Area, for a total of 2,688 acres of surface disturbance. Of this, 1,312 acres are public lands, 1,072 acres are private, and 304 acres are split estate. The Project Area encompasses portions of T. 31 N., R. 47 E., Sections 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 17, and T. 32 N., R. 47 E., Sections 32, 33, and 34.

Construction and ore production would begin as early as the fourth quarter of calendar year 1996 with construction completion in mid- to late-1997. Based on currently identified reserves, active mining would continue for approximately 9 years, followed by site closure and reclamation over a period of approximately 4 years. Mine closure and reclamation would be completed in accordance with the reclamation plans as described in the Draft and Final EIS and detailed in the Plan of Operations. Total mine life, including 1 year of construction, 9 years of operation, and 4 years of reclamation, is projected at approximately 14 years.

#### **SUPPLEMENTAL MITIGATION**

Supplemental mitigation measures were added to the Final EIS and are hereby stipulated as part of the decision of the BLM. These measures, which are described in detail beginning on page 9 of this Record of Decision, are summarized as follows:

- 1) Stipulation that based on the results of post-mining water quality monitoring, the areas of shallow ponding projected to occur as a result of ground water inflow in the southern portion of the West Pit and the central portion of the South Pit will be partially backfilled to preclude ponding if water quality would adversely affect the health of humans or terrestrial or avian wildlife (see Nevada Administrative Code 445A.429 for specific State regulation).
- 2) Stipulation that if any ponding in any of the mine pits which remain following completion of mining as a result of meteoric events or surface water inflow creates the potential to degrade waters of the state or to adversely affect the health of humans or terrestrial or avian wildlife (see Nevada Administrative Code 445A.429 for specific State regulation), Santa Fe Pacific Gold Corporation will mitigate the problem by ripping to alleviate compaction, partial backfilling to eliminate ponding, or other appropriate measures.
- 3) Stipulation that until a mill and associated facilities are constructed, the project fence line will enclose only those areas to be disturbed consistent with air emissions boundary requirements, in order to maintain continued grazing access and livestock and wildlife access to unaffected springs.
- 4) Stipulation that Santa Fe Pacific Gold Corporation will, in consultation with the BLM, the Nevada Division of Wildlife, the Nevada Division of Water Resources, and any affected water right holder or grazing permittee, develop and implement appropriate

mitigation measures to replace flow or volume losses and mitigate any impacts to access for any affected springs, seeps, or associated riparian resources. Where applicable, permits will be obtained from the Nevada Division of Water Resources.

- 5) Stipulation that Santa Fe Pacific Gold Corporation will modify final reclaimed configurations for overburden and interburden disposal area outcrops to address visual impact concerns while assuring compliance with applicable stability, drainage, and reclamation requirements. Santa Fe Pacific Gold Corporation will be limited to construction of only the first 50-foot lift of any given overburden and interburden disposal area until design modifications are finalized and approved by both the BLM and the Nevada Division of Environmental Protection.

## **ALTERNATIVES ANALYZED IN DETAIL**

### **No-Action Alternative**

The No-Action Alternative serves as the baseline for evaluation of the potential effects of all other project alternatives. Under this alternative, the Proposed Action and other action alternatives would not occur, and development and use of lands within the project boundaries would be limited to the existing uses of livestock grazing, wildlife habitat, dispersed recreation, and ongoing permitted mineral exploration activities. Upon completion of mineral exploration, the associated disturbance areas would be reclaimed consistent with the provisions of the approved exploration permits. Existing resource values would remain in their current condition subject to the actions and impacts of ongoing mineral exploration and other previously approved activities. Any potential impacts related to the Proposed Action and alternatives would be precluded, but associated benefits would also be lost.

### **East Access Alternative**

The East Access Alternative includes essentially the same components and options as the Proposed Action with the exception that the west access (Beacon Light Road) would be replaced or supplemented by one of two potential eastern access routes. Right-of-way constraints and potential impacts on cultural resources, Waters of the United States, and potential wetlands areas could be greater for an eastern access route. Government entities for Lander County have also indicated strong support for the west access route, which would encourage local economic development.

The preferred eastern access route would originate at State Route 306 near Beowawe and follow existing roads for a distance of approximately 6.1 miles to the point where the existing road crosses over a high-pressure steam pipeline from the Beowawe Geothermal Plant. From this point, approximately 4.5 miles of new road running due west along the section line would be constructed, terminating at the proposed mill site. This preferred eastern access route would cover a distance of approximately 10.6 miles.

The secondary eastern access route would originate at State Route 306 approximately 1.7 miles south of Beowawe and follow existing roads, ending at the proposed mill site. The secondary eastern access route would cover a distance of approximately 12 miles, requiring widening and upgrading over most of this distance.



### **Overburden and Interburden Disposal Area Configuration Alternative**

The Overburden and Interburden Disposal Area Configuration Alternative includes essentially the same components and options as the Proposed Action except that the configuration of the overburden and interburden disposal areas would be modified. Modifications would include elimination of the outslope benches, changes in final outslope angles, and resultant changes in pile heights and footprints.

Options for modification of disposal area outsoles would include:

- 1) Elimination of outslope benches while keeping outslope gradients the same (toe of piles moved back, decreasing pile footprint);
- 2) Elimination of outslope benches and grading of pile outsoles to a reduced overall gradient (toe of piles does not change but eliminates intermediate catch benches as drainage breaks); and
- 3) Both elimination of outslope benches and reduction of overall outslope gradients (toe of piles moved out, increasing pile footprint and slopes are flattened).

This alternative responds to BLM concerns including the issues of long-term slope stability, reclamation feasibility, grazing impacts and use, and visibility.

### **ALTERNATIVES ELIMINATED FROM DETAILED ANALYSIS**

#### **Project Location Alternative**

The project location is defined by the location and distribution of economically recoverable mineral reserves. The location and extent of naturally occurring mineralization is fixed and both general mine location and the specific location of mine pits have been determined through extensive exploration. The alternative of another project location was, therefore, eliminated from detailed analysis as impractical.

#### **Mining Methods Alternative**

For the Mule Canyon Mine the choice of mining method was determined primarily by the relatively shallow depth of the deposit and the very fine disseminated nature of the gold. This type of deposit can only be economically recovered by taking advantage of the economies of scale offered by open pit mining methods.

#### **Total Backfill Alternative**

Since the proposed surface mining methods would involve excavation of both ore and overburden and interburden materials and would result in several open pits, the alternative exists of backfilling all pits with waste rock. This alternative has the advantages of eliminating the open pits, reducing the size and number of overburden and interburden disposal areas, and allowing final reclamation and future use of the surface areas above the filled pits.

As a component of the Proposed Action, Santa Fe Pacific Gold Corporation proposes to totally backfill and reclaim the Main Pit. In addition, the potential to partially or fully backfill

other mine pits is considered under the Proposed Action as a project option which could be implemented depending on material, operational, and economic factors at the time that economically recoverable reserves are depleted in each successive pit area.

The alternative of totally backfilling all of the proposed pits offers certain potential benefits, but is constrained by operational, environmental, and economic considerations as defined in the EIS. Therefore, the alternative of totally backfilling all pits was eliminated from detailed analysis.

#### **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The National Environmental Policy Act of 1969, as interpreted through regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations 1500-1508), requires that the Record of Decision for any Federal Action identify an "environmentally preferable" alternative(s). By its nature, the Proposed Action, as well as each of the project alternatives identified and analyzed in the EIS, will result in new surface disturbance and associated environmental impacts. The Battle Mountain District Manager has selected the Proposed Action, as modified in the Final EIS to include BLM-stipulated supplemental mitigation measures, as the Agency Preferred Alternative. The selected alternative is also the Environmentally Preferable Alternative. This alternative was selected because when compared with the other action alternatives analyzed in the EIS it:

- Minimizes the area of total project-related surface disturbance;
- Effectively balances overburden and interburden disposal area stability and erosion control considerations with visual impact concerns;
- Addresses post-mining water quality concerns for shallow pond areas relative to potential wildlife impacts;
- Provides for interim mitigation of project-related livestock and wildlife impacts by limiting the area enclosed by the project fence line until such time as construction of a mill and associated facilities occurs; and
- Includes a specific mechanism for mitigation of grazing and wildlife impacts associated with the loss or reduction of flow or volume from affected springs and seeps.

## MANAGEMENT CONSIDERATIONS

The rationale for the above decision is promulgated through the surface mining regulations (43 Code of Federal Regulations 3809), the Federal Land Policy and Management Act of 1976, and the General Mining Law of 1872. The Plan of Operations has been properly analyzed under the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act of 1969 (40 Code of Federal Regulations 1500-1508). Selection of the Proposed Action would allow Santa Fe Pacific Gold Corporation to make legitimate use of the public lands without causing undue or unnecessary environmental degradation. Long-term reclamation would result in conditions that support post-mining land uses of public lands.

The rationale for selecting the Proposed Action as modified in the Final EIS was previously discussed in this Record of Decision under "Environmentally Preferable Alternative".

Santa Fe Pacific Gold Corporation's Mule Canyon Mine is located in an area within the Battle Mountain District where mining has been identified as an appropriate land use that is in conformance with the *Shoshone-Eureka Resource Management Plan Record of Decision* (1986).

The Mule Canyon Mine is not included in any areas of designated national, regional, or local significance. Santa Fe Pacific Gold Corporation has met concurrence requirements pursuant to the Surface Occupancy Regulations (43 Code of Federal Regulations 3715.3-4). Mining, by law, is a valid use of the public lands, which is inherently site-specific and which does not lend itself to relocation.

The BLM and Santa Fe Pacific Gold Corporation have collaborated to limit and/or mitigate environmental impacts that may result from the project. The Plan of Operations and the mitigation measures outlined in the following section will minimize the potential adverse environmental impacts identified in the Final EIS. The monitoring requirements of the Plan of Operations and EIS will assist the BLM, Santa Fe Pacific Gold Corporation, and others in identifying, mitigating, or avoiding any unforeseen environmental impacts that may occur. The monitoring shall provide periodic opportunities for the BLM to refine and modify the mitigation measures.

The Mule Canyon Mine reclamation cost estimate for the total possible disturbance of 2,931 acres as described in the Plan of Operations is approximately \$25,759,000. The removal of buildings and other salvageable materials, recontouring of all surface disturbances except open pits, detoxification of process related components, placement of growth media, revegetation, post-closure monitoring, and administrative costs are all included in this estimate.

The Mule Canyon Mine will be bonded in phases. The initial stages of the Proposed Action (Alternative B), as described in the EIS and detailed in the Plan of Operations, have been designated as Phase A. Phase A has a reclamation cost estimate of \$15,488,700 for 1,409 acres of proposed disturbance (see Plan of Operations Approval).

All required Federal, State of Nevada, and local government permits must be in place before construction and operations commence.

## MONITORING AND MITIGATION

Reasonable and practicable means to avoid or minimize environmental harm from the selected alternative have been adopted. All mitigation will be implemented and enforced.

The operation will be monitored under the inspection and enforcement procedures according to 43 Code of Federal Regulations 3809. This will require periodic compliance exams by the BLM during construction, and quarterly mine plan compliance exams by the BLM during operation of the project.

Santa Fe Pacific Gold Corporation will have a quality assurance/quality control program established for the construction of the mine facilities as outlined in the Nevada Division of Environmental Protection Water Pollution Control Permit. Quality control documents and as-built drawings will be submitted to the BLM after construction is completed.

This Record of Decision expressly incorporates each of the following monitoring requirements and mitigation measures. In addition to stipulations, monitoring, and mitigation included in the Plan of Operations, the decision of the Battle Mountain District Manager expressly includes implementation and enforcement of the following monitoring and mitigation.

### SURFACE WATER HYDROLOGY

The operational control, mitigation, and monitoring practices included as components of the selected alternative will provide for mitigation of potential surface water impacts. These measures include:

- Diversion of runoff around major facilities;
- Local erosion and sediment controls;
- Use of holding ponds for pit dewatering discharge;
- Characterization and isolation of potential acid-generating materials;
- Design and operation of the heap leach and tailings facilities as zero-discharge circuits;
- Design for process water recycling to limit the potential for discharges;
- A Spill Prevention, Control, and Countermeasures plan to address any accidental discharge;
- Provisions for regular surface and ground water monitoring; and
- Reclamation of all surface facilities including, but not limited to, overburden and interburden disposal areas, heap leach facility, and tailings facility to eliminate fluid accumulations, promote effective drainage, and minimize infiltration.

Surface and ground water monitoring requirements will include:

- Weekly inspections of the leach pad leak detection pipe, tailings pond, and other components of the fluid management system;
- Weekly inspection of the leak-detection manhole of the leach facility overflow pond, and of the manhole of the tailings facility seepage-collection pond;
- Monthly measurement of the depth of the tailings pond and water levels in the tailings embankment piezometers;
- Quarterly sampling and analysis of the tailings facility seepage-collection pond (Nevada Division of Environmental Protection Profile II analysis), ground water monitoring wells (water levels and Nevada Division of Environmental Protection Profile I analysis), pregnant and barren leach solutions (Nevada Division of Environmental Protection Profile II analysis), tailings water (Nevada Division of Environmental Protection Profile II analysis), tailings solids (meteoric water mobility analysis), and waste rock confirmation testing (acid generating potential/acid neutralizing potential and meteoric water mobility analysis);
- Sampling and analysis initially and then annually of the water in the water supply storage tank (Nevada Division of Environmental Protection Profile I analysis); and
- Sampling and analysis on an as-needed basis for any excess pit dewatering flows to be utilized for purposes other than process make-up water (Nevada Division of Environmental Protection Profile I analysis).

Under applicable provisions of the Nevada Division of Environmental Protection Water Pollution Control Permit, water monitoring results will be summarized and submitted quarterly, and a report comparing monitoring results with baseline conditions will be developed and submitted annually to the Nevada Division of Environmental Protection.

To ensure compliance with surface management regulations (43 Code of Federal Regulations 3809), Santa Fe Pacific Gold Corporation will forward copies of all monitoring reports relating to surface water quality and quantity to the BLM's Battle Mountain District Office and Nevada State Office.

Nevada law prohibits the creation of pit lakes which degrade waters of the State or have the potential to adversely affect human health or terrestrial or avian wildlife (see Nevada Administrative Code 445A.429 for specific State regulation). Following completion of mining, any persistent ponding or permanent accumulations of water in the final mine pits, including the permanent pit lake, will be sampled and analyzed on an annual basis. Monitoring may continue for a period of up to 30 years following mine closure to verify compliance with State law.

Given that potential surface water hydrologic impacts will be addressed by specific regulatory standards for operation, maintenance, monitoring, reporting, and reclamation, the primary supplemental mitigation will be ongoing compliance with required State plans and permits. Under applicable Nevada law, Santa Fe Pacific Gold Corporation is required to demonstrate that existing and proposed facilities do not have the potential to degrade the waters of the State.

In addition, this decision stipulates that based on the results of post-mining water quality monitoring, the areas of shallow ponding projected to occur as a result of ground water inflow in the southern portion of the West Pit and the central portion of the South Pit will be partially backfilled to preclude ponding if water quality would adversely affect the health of humans or terrestrial or avian wildlife.

This decision also stipulates that if any ponding in any of the mine pits which remain following completion of mining as a result of meteoric events or surface water inflow creates the potential to degrade waters of the state or to adversely affect the health of humans or terrestrial or avian wildlife, Santa Fe Pacific Gold Corporation will mitigate the problem by ripping to alleviate compaction, partial backfilling to eliminate ponding, or other appropriate measures.

### **GROUND WATER HYDROLOGY**

Specific facility design and operational control and monitoring considerations and practices incorporated as components of the selected alternative will provide mitigation for potential ground water impacts. These considerations and practices include:

- Controlled drainage and removal of surface and ground water inflows to mine pits during active operations;
- Characterization and isolation of potential acid-generating materials;
- Limitation of any backfilling to nonsulfide materials;
- Design of the ore stockpile, heap leach, and tailings facilities with low-permeability liners and leak detection systems (leach and tailings facilities only);
- Operation of the heap leach and tailings facilities as zero-discharge circuits;
- A Spill Prevention, Control, and Countermeasures plan to address accidental discharges of potentially hazardous materials;
- Design of the mine water supply system to minimize drawdown, and design for process water recycling to limit the potential for discharges and minimize water supply requirements;
- Provisions for regular ground water monitoring (addressed in the previous section); and
- Reclamation of all surface facilities including, but not limited to, overburden and interburden disposal areas, heap leach facility, and tailings facility to eliminate fluid accumulations, promote effective drainage, and minimize infiltration.

Potential ground water impacts will be addressed by ongoing compliance with specific State of Nevada regulatory standards for operation, maintenance, monitoring, reporting, and reclamation.

To ensure compliance with surface management regulations (43 Code of Federal Regulations 3809), Santa Fe Pacific Gold Corporation will forward copies of all monitoring

reports relating to ground water quality and quantity to the BLM's Battle Mountain District Office and Nevada State Office.

Any loss or reduction of flow rate or volume of appropriated or non-appropriated waters to wildlife or livestock within the project area shall be mitigated by the replacement of the amount of lost flow or volume such that total annual flow results in approximately the original annual flow volume, consistent with seasonal use and variability. Mitigation, which may include spring developments; installation of wells, pipelines, pumping systems, and/or guzzlers; and/or other water development systems, shall be accomplished in a timely manner. An annual report for all existing water sources (as outlined in the EIS), showing baseline flow data with flow volume for each year of the mining operation, shall be submitted by Santa Fe Pacific Gold Corporation to the BLM.

Mitigation for the loss or reduction in water flow will be completed in consultation with, and coordinated between, the BLM, the Nevada Division of Wildlife, the Nevada Division of Water Resources, Santa Fe Pacific Gold Corporation, and any affected water-right holder or grazing permittee. A loss or reduction in water availability to wildlife or livestock shall be determined to have occurred with the physical loss of springs or the exclusion of livestock or wildlife from water, or based on comparison of a minimum of three years of flow data with baseline data. Loss of water or reduction in water availability shall be determined by the BLM, the Nevada Division of Wildlife, and the Nevada Division of Water Resources. Where applicable, permits will be obtained from the Nevada Division of Water Resources.

Installation, funding and full maintenance of these water developments will be the responsibility of Santa Fe Pacific Gold Corporation or the current Mule Canyon Mine Operator until post-closure monitoring requirements have been met.

This mitigation is not be construed as affecting the authority or regulatory requirements of any agency of the State of Nevada.

## **SOILS**

The specific design considerations and operation and reclamation practices included as components of the selected alternative will help alleviate soils impacts. These considerations and practices include:

- Design of mine structures to assure stability and minimize erosion potential;
- Establishment and maintenance of drainage and sediment control structures;
- Testing and characterization of soil suitability relative to use as a revegetation medium;
- Salvage, stockpiling, and replacement of available soil and other suitable materials; and
- Revegetation of mine disturbance areas to stabilize replaced soils and minimize erosion.

## **RANGE RESOURCES**

Reclamation will help reduce long-term impacts to range resources. As an interim mitigation measure, Santa Fe Pacific Gold Corporation will reduce the area enclosed by the project fence line until such time as a mill is constructed. The reduction in the fenced area will allow continued grazing access and use for approximately 3,735 acres (or 374 AUMs) and continued access to three springs. Any loss or impairment of flow from springs for which existing valid water rights exist is subject to the jurisdiction of the Nevada Division of Water Resources with specific requirements for timely replacement or other mitigation.

"Open Range" signs and posted speed limits, both for mine roads and County access roads, will reduce the potential for vehicle-livestock collisions. In the event that livestock damage does occur as a result of a vehicle-livestock collision, the individual or entity responsible for the loss will be liable for reasonable compensatory damages under applicable open range laws. Santa Fe Pacific Gold Corporation will assume responsibility for any damages involving company-owned vehicles.

## **WILDLIFE**

Reclamation of mining-related disturbance will reduce long-term impacts to wildlife habitat in the mine area. Proposed reclamation plans focus on reestablishment of a mid- to late-successional mixed grassland-shrub community with cover and production values comparable to or greater than existing pre-mining vegetation communities. Partial backfilling of shallow pond areas as stipulated by the BLM will preclude accumulation of poor quality water. Solution control and detoxification, wildlife exclosures, and speed limits on mine roads will provide necessary protective measures.

## **CULTURAL RESOURCES**

As noted and described in the EIS, potential project-related cultural resource impacts which would result from the selected alternative have been or will be effectively mitigated through implementation of a cultural resource management plan developed and administered under a programmatic agreement between Santa Fe Pacific Gold Corporation, the State Historic Preservation Office, and the BLM. Mitigation provisions for any newly discovered sites are addressed in the existing programmatic agreement.

## **TRANSPORTATION**

As a safety consideration, Lander County has requested that the Nevada Department of Transportation designate a speed limit of 45 mph for the Interstate 80 frontage road.

## **AIR QUALITY**

Project-related air quality impacts which could occur as a result of implementation of the selected alternative will be mitigated by operational control and reclamation measures including:

- Facility design to minimize or enclose potential emission sources;



- Implementation of best available control technology methods for specific process emission sources;
- Application of appropriate control measures for nonprocess emission sources, including dust control for the Beacon Light Road as stipulated in a contract between Santa Fe Pacific Gold Corporation and Lander County; and reasonable speed limits, maintenance, and dust control for mine haulage and access roads; and
- Reclamation and surface stabilization of mine disturbance areas.

Potential project-related air emissions will also be controlled through ongoing compliance with the Nevada Division of Environmental Protection Air Emissions Permit.

### **VISUAL RESOURCES**

Project design considerations incorporated as components of the selected alternative will reduce temporary and permanent visual impacts. Site reclamation will address, to the extent possible, visual contrasts of line, form, color, and texture.

The proposed outslope design of the overburden and interburden disposal areas, while assuring stability and erosion control, will result in linear benchline features. In order to meet visual resources management objectives and to address visual impact concerns relating to benches and associated linear contrasts, the BLM is stipulating that Santa Fe Pacific Gold Corporation develop modified outslope designs to be implemented where appropriate. Modifications will include, but not be limited to, rounding bench edges, varying bench widths, varying final bench topography, and flattening both overall and intermediate bench slopes. Possible options for modified bench designs are graphically illustrated in Figure 4-7 of the Final EIS. These designs will be utilized in overburden and interburden disposal area planning and construction, and will result in final reclaimed configurations that blend with the existing topography while meeting design requirements for long-term seismic and erosional stability, control of infiltration, and successful vegetative reestablishment.

Santa Fe Pacific Gold Corporation will be limited to construction of only the first 50-foot lift of any given overburden and interburden disposal area until design modifications are finalized and approved by both the BLM and the Nevada Division of Environmental Protection.

## PUBLIC INVOLVEMENT

A Notice of Intent to prepare the Mule Canyon Mine EIS was initially published in the *Federal Register* on February 10, 1992, and a supplemental Notice of Intent addressing an EIS for Santa Fe Pacific Gold Corporation's revised Plan of Operations was published on April 12, 1995. Public scoping meetings for the EIS were held on April 7, 8, and 9, 1992 in Battle Mountain, Elko, and Reno, Nevada; and on May 24 and 25, 1995 in Battle Mountain and Crescent Valley, Nevada. The BLM and Santa Fe Pacific Gold Corporation also held a briefing for the Lander County Commissioners. Issues presented during scoping for the Mule Canyon Mine EIS are listed in Chapter 1.0 of the Draft EIS.

During preparation of the EIS, the BLM prepared and distributed two newsletters on August 29, 1992 and July 12, 1995 to keep the public informed on the status of the EIS and provide relevant information on project-related issues.

The BLM filed the Mule Canyon Mine Draft EIS with the U.S. Environmental Protection Agency on May 3, 1996 and distributed the Draft EIS for review and comment to agencies, individuals, and organizations on the BLM's Mule Canyon Mine mailing list. The U.S. Environmental Protection Agency published the Notice of Filing for the Draft EIS on May 10, 1996. The public comment period on the Draft EIS was initiated by this Notice of Filing and extended for 61 days, ending on July 10, 1996.

During the public comment period on the Draft EIS, one public meeting was held in Battle Mountain, Nevada on June 5, 1996, from which 22 substantive comments were identified. In addition to oral comments received during the public comment meeting, the BLM received 21 written comment letters from which a total of 101 additional substantive comments were identified. All public comments on the Draft EIS, including both oral and written comments, were reviewed and responses to the substantive comments were included in the Final EIS.

The BLM filed the Mule Canyon Mine Final EIS with the U.S. Environmental Protection Agency on September 20, 1996 and distributed the Final EIS to agencies, individuals, and organizations on the BLM's Mule Canyon Mine mailing list. The U.S. Environmental Protection Agency published the Notice of Filing for the Final EIS on September 27, 1996. The public availability period for the Final EIS, which was initiated by this Notice of Filing, began on September 27, 1996 and ended on October 29, 1996.

## PLAN OF OPERATIONS APPROVAL

### MINE PLAN N64-92-001P APPROVED

The Plan of Operations for Santa Fe Pacific Gold Corporation's Mule Canyon Mine, submitted in accordance with Nevada Division of Environmental Protection and BLM regulations, was received in the BLM's Battle Mountain District Office on November 30, 1994 and assigned casefile number N64-92-001P.

The proposed operations will occur on public, private, and split estate lands administered by the BLM, Battle Mountain District Office, and the Nevada Division of Environmental Protection, in MDM, T. 31 N., R. 47 E., Sections 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 17, and T. 32 N., R. 47 E., Sections 32, 33, and 34. The Plan of Operations proposes up to 2,931 acres of disturbance related to the development of a multiple open pit mining operation and associated facilities in Lander County, Nevada. Analysis for environmental impacts associated with the Plan of Operations has been satisfied with EIS NV63-EIS97-09.

In accordance with the 1990 Nevada Division of Environmental Protection-USDA Forest Service-USDI BLM Memorandum of Understanding, this office received notification from the Nevada Division of Environmental Protection on October 19, 1995, that the Plan of Operations is consistent with their regulations.

Based on a review of the reclamation cost estimate submitted by Santa Fe Pacific Gold Corporation for the Plan of Operations, this office has determined the total bond amount to be approximately \$25,759,000 for the 2,931 acres of total possible surface disturbance. At Santa Fe Pacific Gold Corporation's request, the Plan of Operations will be bonded in phases. The Phase A surety bond covers 1,409 acres of disturbance from Plan of Operations activities proposed for calendar years 1996 and 1997. These activities are part of the Proposed Action (Alternative B) as described in the EIS and include facility construction, open pit mining, and ore processing. After 1997, the bond will be recalculated every three years, and adjusted accordingly.

Santa Fe Pacific Gold Corporation has specifically not requested bond reduction at this time. Therefore, the bond amount for Phase A of the Plan of Operations was determined to be \$15,488,700. The Battle Mountain District received concurrence on the Phase A bond amount from the Nevada Division of Environmental Protection on October 22, 1996. The BLM's Nevada State Office accepted a surety bond for this amount from Santa Fe Pacific Gold Corporation on October 23, 1996. Additional surety bonding is required before Santa Fe Pacific Gold Corporation can engage in any Plan of Operations activities other than those described in the plans for Phase A.

Based on the Plan of Operations and the Record of Decision for the Mule Canyon Mine EIS, approval of the Plan of Operations is granted. Approval is with the understanding that Santa Fe Pacific Gold Corporation will implement only bonded portions of the Proposed Action (Alternative B). The mitigation measures and monitoring requirements associated with the Proposed Action (Alternative B), as described in the EIS, must be implemented as an integral part of the surface operating plan for all phases of the Plan of Operations. All required Federal, State, and local government permits must be in place before operations commence.

Approval of the Plan of Operations will not now nor in the future serve as a determination of the ownership or the validity of any mining claim in which it may relate. Approval of the Plan of Operations in no way implies the economic viability of the operation. Any modification to the Plan of Operations must be coordinated with and approved by the Authorized Officer. Surface occupancy related to the Plan of Operations is reasonably incident to the mining operation.

The existing eastern access routes involve private lands and county managed roads for which the BLM has no regulatory jurisdiction. This approval does not include or imply any access over the eastern transportation corridors.

## **APPEALS**

### **Operator**

The operator (Santa Fe Pacific Gold Corporation) has the right to appeal this decision to the Nevada State Director, Bureau of Land Management, in accordance with 43 Code of Federal Regulations 3809.4. If the operator chooses to exercise this right, the appeal, and a statement of reasons and any arguments presented to justify reversal or modification of this decision, must be filed in writing at the following office: Bureau of Land Management, Battle Mountain District, P.O. Box 1420, Battle Mountain, Nevada 89820. The appeal and the statement of reasons must be filed within 30 days after the date of receiving this decision. The appellant has the burden of showing that the decision being appealed is in error. This decision will remain in effect during the appeal unless a written request for a stay is granted.

### **Others**

If a party other than the operator is aggrieved by the approval of the Mule Canyon Mine Plan of Operations, the decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 Code of Federal Regulations, Part 4 and Form 1842-1 (attached). If an appeal is made, a notice of appeal must be filed at the Bureau of Land Management, Battle Mountain District, P.O. Box 1420, Battle Mountain, Nevada 89820, within 30 days after the date that this decision has been issued. The appellant has the burden of showing that the decision being appealed is in error. A statement of reasons and any arguments the appellant wishes to present to justify reversal or modification of this decision should be filed during the 30-day appeal period.

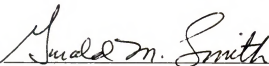
If the appellant wishes to file a petition (request) (pursuant to regulation 43 Code of Federal Regulations 4.21) for a stay (suspension) of the effectiveness of this decision during the time that the appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany the notice of appeal. A petition for a stay is required to show sufficient justification based on the standards for obtaining a stay. Copies of the notice of appeal and petition for a stay must also be submitted to the appropriate Office of the Solicitor (see 43 Code of Federal Regulations 4.413) at the same time the original documents are filed with this office. If the appellant requests a stay, the appellant has the burden of proof to demonstrate that a stay should be granted.

*Standards for Obtaining a Stay*

Except as otherwise provided by law or by other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of immediate and irreparable harm if the stay is not granted, and
4. Whether the public interest favors granting the stay.

**Record of Decision and Plan of Operations Approval:**



Gerald M. Smith  
Battle Mountain District Manager

October 29, 1996

One (1) attachment: Form 1842-1, *Information on Taking Appeals to the Board of Land Appeals*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

1. This decision is adverse to you,  
AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL . . . . Within 30 days file a *Notice of Appeal* in the office which issued this decision (see 43 CFR Secs. 4.411 and 4.413). You may state your reasons for appealing, if you desire.

2. WHERE TO FILE  
NOTICE OF APPEAL . . . . Bureau of Land Management  
Battle Mountain District  
P.O. Box 1420  
Battle Mountain, NV 89820

SOLICITOR  
ALSO COPY TO . . . . Regional Solicitor, Pacific Southwest Region  
U.S. Department of the Interior  
2800 Cottage Way, Room W-2215  
Sacramento, CA 95825-1890

3. STATEMENT OF REASONS . . . . Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of the Secretary, Board of Land Appeals, 4015 Wilson Blvd., Arlington, Virginia 22203 (see 43 CFR Sec. 4.412 and 4.413). If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary.

SOLICITOR  
ALSO COPY TO . . . . Regional Solicitor, Pacific Southwest Region  
U.S. Department of the Interior  
2800 Cottage Way, Room W-2215  
Sacramento, CA 95825-1890

4. ADVERSE PARTIES . . . . Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (see 43 CFR Sec. 4.413). Service will be made upon the Associate Solicitor, Division of Energy and Resources, Washington, D.C. 20240, instead of the Field or Regional Solicitor when appeals are taken from decisions of the Director (WO-100).

5. PROOF OF SERVICE . . . . Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of the Secretary, Board of Land Appeals, 4015 Wilson Blvd., Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (see 43 CFR Sec. 4.401(c)(2)).

Unless these procedures are followed your appeal will be subject to dismissal (see 43 CFR Sec. 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (see 43 CFR Sec. 4.401(a))

SUBPART 1821.2--OFFICE HOURS; TIME AND PLACE FOR FILING

Sec. 1821.2-1 *Office hours of State Offices.* (a) State Offices and the Washington Office of the Bureau of Land Management are open to the public for the filing of documents and inspection of records during the hours specified in this paragraph on Monday through Friday of each week, with the exception of those days where the office may be closed because of a national holiday or Presidential or other administrative order. The hours during which the State Offices and the Washington Office are open to the public for the filing of documents and inspection of records are from 10 a.m. to 4 p.m., standard time or daylight saving time, whichever is in effect at the city in which each office is located.

Sec. 1821.2-2(d) Any document required or permitted to be filed under the regulations of this chapter, which is received in the State Office or the Washington Office, either in the mail or by personal delivery when the office is not open to the public shall be deemed to be filed as of the day and hour the office next opens to the public.

(e) Any document required by law, regulation, or decision to be filed within a stated period, the last day of which falls on a day the State Office or the Washington Office is officially closed, shall be deemed to be timely filed if it is received in the appropriate office on the next day the office is open to the public.

\* \* \* \* \*

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on Mine

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Mule Canyon Mine

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BUREAU OF LAND MANAGEMENT  
BATTLE MOUNTAIN DISTRICT OFFICE  
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BATTLE MOUNTAIN, NEVADA 89820

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